Attorney Docket No.: 16869P-078200US Client Reference No.: 340102006US1

DEFECT INSPECTION METHOD

ABSTRACT OF THE DISCLOSURE

The present invention relates to a defect detection or observation method that detects fine defects in the course of defect inspection and observation, does not detect locations not constituting defects, or classifies a defect candidate as a grain phenomenon or other phenomenon that does not affect a product. In one embodiment, a method for inspecting defects of a product having a plurality of product units formed repetitively at different locations comprises obtaining an image of the product units on the product having an appearance to be observed; detecting regions of the image each having an appearance which differs from an expected appearance by greater than a preset threshold; calculating feature amounts for the detected regions; classifying the detected regions into groups of defect candidates; forming an aggregate of the feature amounts of the detected regions in the different product units, for each of the groups of defect candidates; and determining for each product unit attributes for the detected regions by comparing the feature amounts of the detected regions belonging to each group of defect candidates with a distribution of the aggregate of the feature amounts for the group of defect candidates.

PA 3311848 v1